

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 86-50

WATER RECLAMATION REQUIREMENTS FOR:

MARIN COUNTY OFFICE OF EDUCATION
WALKER CREEK RANCH
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (the Board), finds that:

1. The Marin County Office of Education (the discharger) submitted a report of waste discharge and supporting technical information to the Board on May 21, 1986. The report concerned the treatment and disposal of wastewater generated at Walker Creek Ranch, in Marin County.
2. Walker Creek Ranch is located at 4300 Marshall-Petaluma Road in western Marin County (see Attachment A). It is about 8 miles north of Point Reyes Station and about 8 miles southeast of Tomales. Walker Creek flows through the ranch about 11 miles upstream of Tomales Bay. The proposed wastewater facilities will be located adjacent to Walker Creek, a water of the State.
3. The 1740-acre ranch is owned by the discharger, who currently leases certain buildings at the ranch to non-profit organizations for educational purposes. The discharger wishes to expand the level of activity, with a total of 100 to 220 residents and 0 to 230 day users, depending on the time of year. These activities would occur at a portion of the ranch known as Walker 1 (see Attachment A).
4. Current use of the ranch is limited to occasional day use at Walker 1 and beef cattle grazing elsewhere on the ranch. The discharger has provided portable toilets at Walker 1 to meet sanitary needs, pending completion of the proposed wastewater system.
5. The proposed level of use would generate about 11,700 gallons per day (gpd) of domestic sewage (annual average). Flows would be slightly lower during summer months and slightly higher during the academic year. The proposed wastewater system includes a pre-existing package wastewater treatment plant with a design capacity of 20,000 gpd, a 3.2 million gallon storage pond, and a 7-acre pasture, to be spray irrigated with reclaimed water. No wastewater will be discharged to surface waters. The package plant provides secondary treatment using the activated sludge process.

Chlorinated effluent will be piped about 1 mile to the storage pond and adjacent reclamation site (see Attachment A). Reclamation will occur during a five-month period: May through September. The reclamation area will serve as a pasture for non-milking animals.

6. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin on July 21, 1982. The Basin Plan prohibits the discharge of wastewater with particular constituents of concern to beneficial uses into non-tidal waters, such as Walker Creek, and to Tomales Bay. The Basin Plan also requires that existing groundwater quality be maintained unless otherwise provided by the State Board.
7. The beneficial uses of Walker Creek and Tomales Bay are:
 - o Cold and warm freshwater habitat (creek only)
 - o Wildlife habitat
 - o Preservation of rare and endangered species
 - o Fish migration and spawning
 - o Water contact and non-contact recreation
 - o Commercial fishing, including shellfish harvesting (Tomales Bay only)
 - o Marine habitat (Tomales Bay only)
8. The discharger is currently subject to waste discharge requirements issued to the San Francisco Foundation and contained in Order No. 84-16, adopted by the Board on April 18, 1984.
9. Section 13523 of the California Water Code provides that a Regional Board may, after consulting with and receiving the recommendation of the Department of Health Services and determining that such action is necessary to protect the public health, safety, and welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.
10. The Department of Health Services has published regulations to establish acceptable levels of constituents in reclaimed water and to prescribe means for assuring reliability in the production of reclaimed water in order to assure that the use of reclaimed water for specified purposes does not impose undue risks to public health. The regulations are contained in Title 22 of the California Administrative Code and form the basis for these requirements.
11. Adoption of revised waste discharge requirements is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et. seq.) pursuant to Section 13389 of the California Water Code.
12. The discharger and interested persons have been notified of the Board's intent to revise requirements for the existing discharge and have been provided with the opportunity to

submit their written comments.

13. The Board, at properly-noticed public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

1. Overflow from the storage pond is prohibited. There shall be no waste discharge to waters of the State from the wastewater collection, treatment, or disposal facilities.
2. Flow to the wastewater treatment plant shall not exceed 12,200 gpd (monthly average).
3. The discharge of waste other than domestic wastewater is prohibited.

B. Reclaimed Water Use Restrictions

1. No reclaimed water shall be applied to the disposal area during the wet weather season (November 15 through April 15). Reclaimed water may be applied during the remainder of the year, except when the ground is saturated or during periods of rainfall.
2. No waste shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray, or resurfacing after percolation.
3. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.
4. Use of reclaimed water on areas not shown on the map which is attached to this order (Attachment A) is prohibited without written authorization from the Executive Officer.
5. Waste shall not be applied within 25 feet of any ephemeral stream or within 100 feet of any other stream, pond (excluding wastewater storage pond), well, or housing.
6. Persons shall be effectively excluded from the areas where reclaimed water is applied.

C. Reclaimed Water Quality Specifications

1. The wastewater as discharged from the treatment and storage facilities to the spray irrigation area shall meet the following quality limits at all times:

5-day BOD 20°C	40 mg/l monthly average
Dissolved oxygen	1.0 mg/l minimum
Dissolved sulfide	0.1 mg/l maximum
pH	Not less than 6.0 nor greater than 9.0
Coliform organisms	Median MPN shall not exceed 240 organisms per 100 ml at some point in the treatment system (median value to be obtained from last 7 samples)
2. The discharger shall discontinue use of reclaimed water during any period in which there is reason to believe that the limits specified in C.1 are not being met.

D. Provisions


1. This order supercedes Order 84-16, which is hereby rescinded.
2. The discharger shall comply with all sections of this order immediately upon adoption.
3. The treatment, storage, or disposal of waste shall not create a nuisance, as defined in Section 13050(m) of the California Water Code.
4. The disposal of waste shall not cause degradation of groundwater suitable for domestic water supply or cause an increase in any quality parameter that would render groundwater unsuitable for irrigation use.
5. A minimum freeboard of two feet shall be maintained in the evaporation ponds at all times.
6. Milking animals shall be excluded from the wastewater disposal area. Sufficient time should be provided between application of reclaimed water and grazing by non-milking animals to allow the wastewater disposal area to dry thoroughly.
7. The wastewater disposal area and any equipment used to transport wastewater shall be clearly identified with

warning signs to inform the public that wastewater is present.

8. Fail-safe treatment shall be provided, including backup power facilities as needed, to assure continuous compliance with these requirements.
9. Wastewater ponding which could provide a breeding area for mosquitos shall be prevented.
10. Sludges and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Division 7.5 of the California Water Code. For the purposes of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Board and which is in full compliance therewith.
11. The discharger shall employ a treatment plant operator with at least a Grade II certification to supervise operation of the wastewater treatment plant, or demonstrate to the Executive Officer's satisfaction that an equivalent level of supervision is being maintained.
12. If someone other than the discharger is responsible for the schedule for applying reclaimed water, then the discharger shall inform that person or persons of these requirements, in a written agreement or other suitable manner.
13. All wastewater facilities shall be constructed (or renovated) and operable before the discharger commences discharging to the storage pond.
14. In reviewing compliance with requirements A.1 and D.5, the Board will take special note of the difficulties which may be encountered in achieving compliance during entire wet seasons having a rainfall recurrence frequency greater than once in ten years.
15. In accordance with Section 13267(c) of the California Water Code, the discharger shall permit the Board or its authorized representative:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept;
 - b. Access to copy any records required to be kept under terms and conditions of this order;
 - c. Inspection of monitoring equipment or records; and
 - d. Sampling of any discharge.

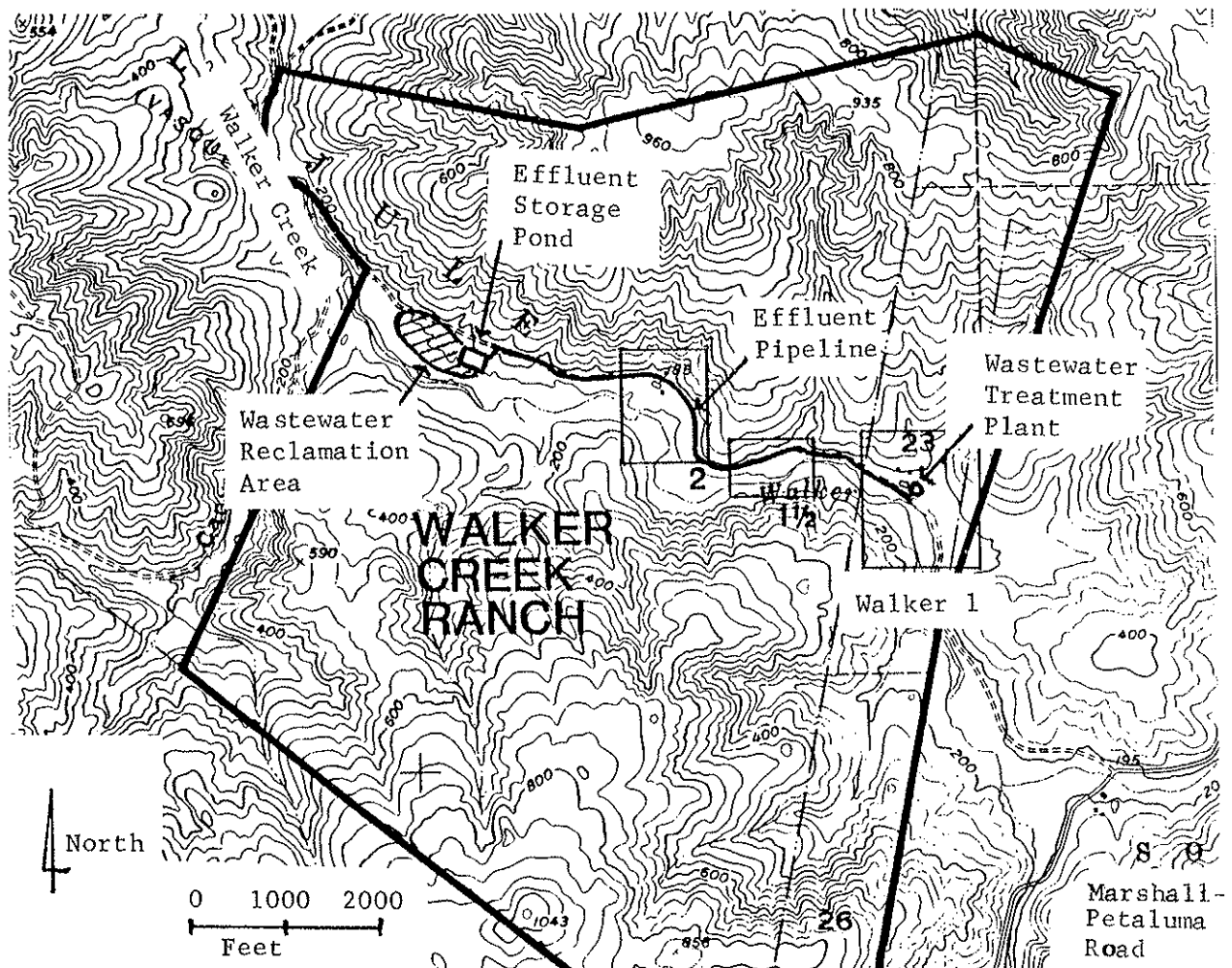
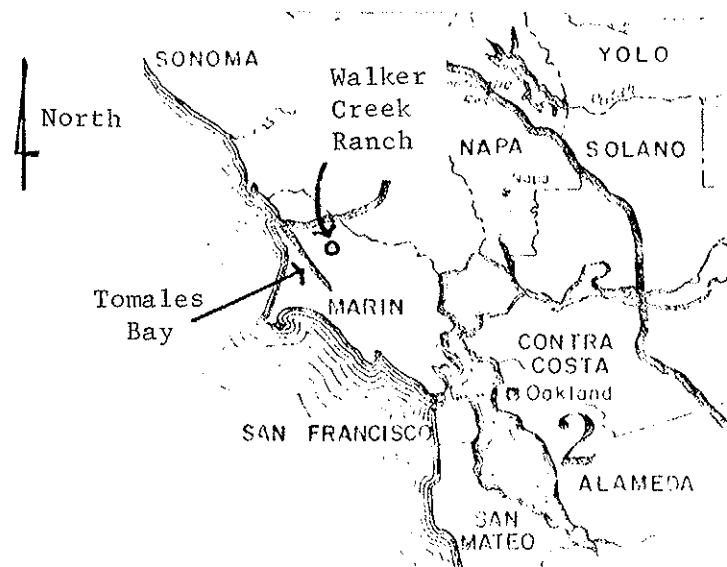
16. The discharger shall comply with the self-monitoring program as adopted by this Board and as may be amended by the Executive Officer.
17. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change in the character, location, or volume of the discharge.
18. This Board will review this Order periodically and may revise the requirements when necessary.

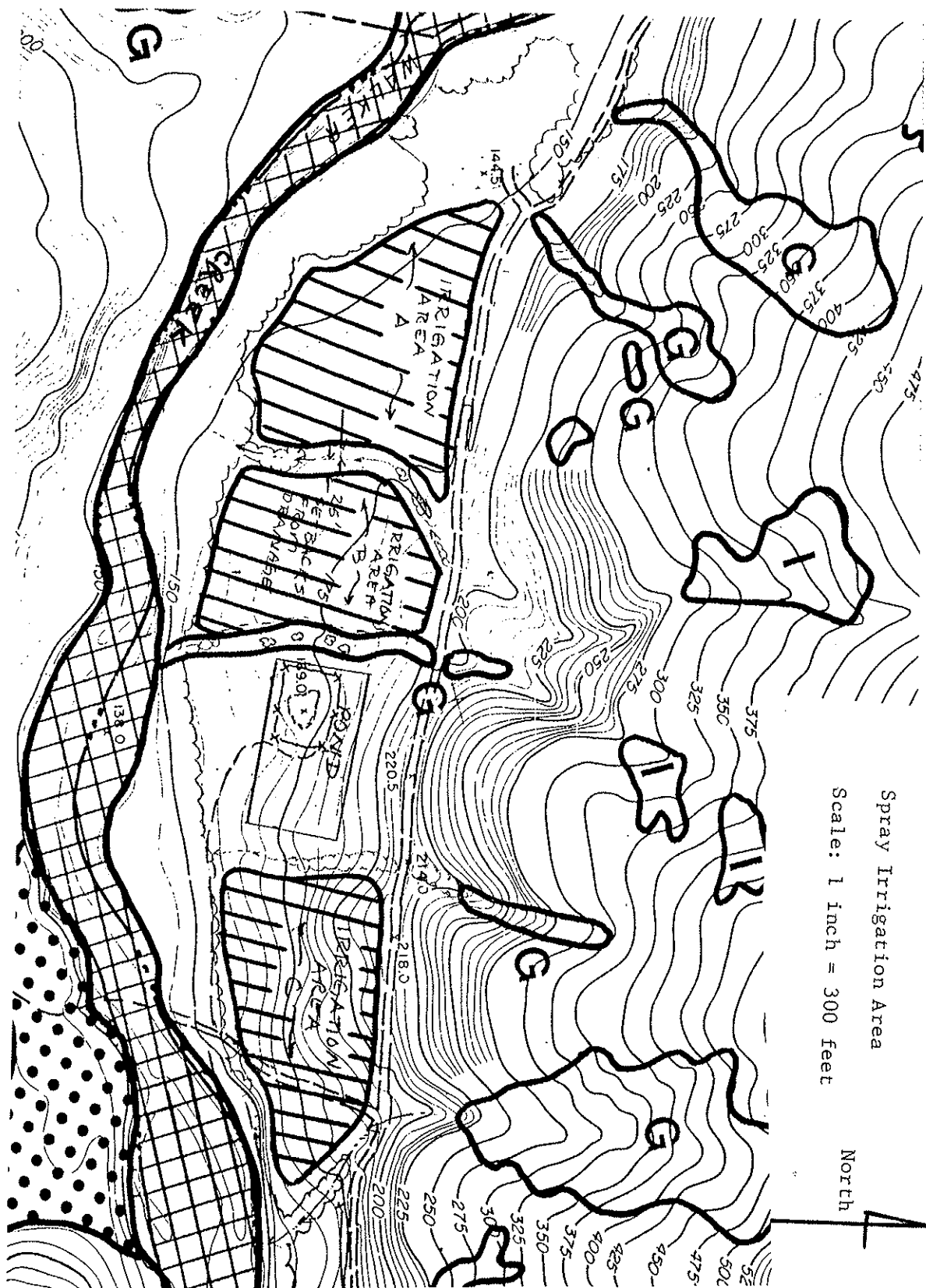
I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 16, 1986.


ROGER B. JAMES
Executive Officer

Attachments:

- A. Map
- B. Self-Monitoring Program





CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Marin County Office of Education

Walker Creek Ranch

Marin County

ORDER NO. 86-50

CONSISTS OF

PART A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

PART A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. The principal purposes of a self-monitoring program are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. DESCRIPTION OF SAMPLING AND OBSERVATION

A. Treatment Plant Influent

Daily, determine average flow in gallons per day (gpd). Calculate monthly average (also in gpd).

B. Treatment Plant Effluent

Monthly, sample treatment plant effluent for the following:

- o BOD (mg/l)
- o Total Coliform Organisms (MPN per 100 ml)

Note: Resample for total coliform within 10 days if the monthly sample exceeds 240 MPN/100 ml

C. Storage Pond

Monthly, sample wastewater at any point one foot below the pond surface for the following:

- o Temperature
- o pH

- o Dissolved oxygen concentration (mg/l)
- o Dissolved sulfides (mg/l), if DO concentration is below 1.0 mg/l

Weekly, perform standard observations along the perimeter of the pond for the following:

- o Freeboard (vertical distance from dike crest to water surface)
- o Evidence of leaching liquid from the pond and estimated size of affected area (include sketch)
- o Odor (if evident, note source and area affected)

D. Wastewater Disposal Area

Daily during the reclamation period, determine volume of wastewater discharged to the wastewater disposal site (in gpd). Calculate monthly average (also in gpd).

Weekly during the reclamation period, perform the following observations in and around the perimeter of the wastewater disposal site:

- o Evidence of runoff from site (if evident, use sketch map to show location and area affected)
- o Evidence of erosion caused by wastewater disposal
- o Odor (if evident, note area affected)

III. REPORTS TO BE FILED WITH THE BOARD

A. Start-up of Wastewater Syustem

The discharger shall notify the Executive Officer in writing when construction of the wastewater system is completed and wastewater is being treated and discharged to the storage pond.

B. Violations of Requirements

In the event the disharger is unable to comply with the conditions of the waste discharge requirements due to:

- (a) maintenance work, power failures, or breakdown of waste treatment equipment; or
- (b) bypassing of untreated or partially treated

wastewater; or

- (c) accidents caused by human error or negligence; or
- (d) other causes such as acts of nature;

the discharger shall notify the Board office by telephone (415-464-1255) as soon as he or his agents have knowledge of the incident and shall confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

C. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar quarter and submitted by the fifteenth day of the following month (i.e. April 15, July 15, October 15, and January 15). The first report shall be due following the first quarter in which the wastewater system is in operation (see item III.A). The reports shall include:

1. Letter of Transmittal

A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the past quarter and actions taken or planned for correcting violations, such as plant operation modifications. The letter transmitting monitoring reports shall be signed by a responsible official. The letter shall contain a statement by the official that to the best of the signer's knowledge the report is true and correct.

2. Data

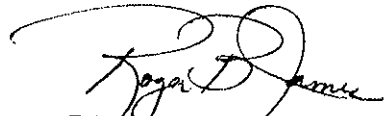
All results observed or analyzed in section II, including dates and times of sampling and observations.

3. Map

A map shall accompany the report, showing the location of the treatment plant, storage pond, wastewater disposal area, and sampling/observation points.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 86-50.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.


ROGER B. JAMES
Executive Officer

Effective Date July 16, 1986